

(11) Publication number:

2000233027 A

Generated Document.

PATENT ABSTRACTS OF JAPAN

11273317 (21) Application number:

(51) Intl. Cl.: A61M 25/01 A61B 1/00 A61M 25/00 B81B 3/00

27.09.99 (22) Application date:

(30) Priority:

publication:

stales:

(71) Applicant: ESASHI MASAKI **ESASHI MASAKI** HAGA YOICHI HAGA YOICHI (72) Inventor: 14.12.98 JP 10355170 29.08.00 (84) Designated contracting (43) Date of application

(74) Representative:

(54) ACTIVE CAPILLARY AND MANUFACTURING OF THE SAME

(57) Abstract:

PROBLEM TO BE SOLVED: To provide an expanding and retracting motion mechanism, bending motion mechanism and a hardness active capillary of a simple structure, having adjusting mechanism, and capable of being a torsional rotating motion mechanism, an

easily thinned and loading a number of soft

wirings, and to provide its manufacturing method.

on a J-shaped curved part, a torsional rotating motion mechanism part B connected to the SOLUTION: An active capillary comprises a bending motion mechanism part A mounted

https://www.delphion.com/cgi-bin/viewpat.cmd/JP20233027A2

3/5/2004

PAGE 8/9* RCVD AT 4/7/2004 7:28:02 PM [Eastern Daylight Time] * SVR:USPTO-EFXRR-1/0 * DNIS:8729306 * CSID:650 638 6677 * DURATION (mm-ss):02-16

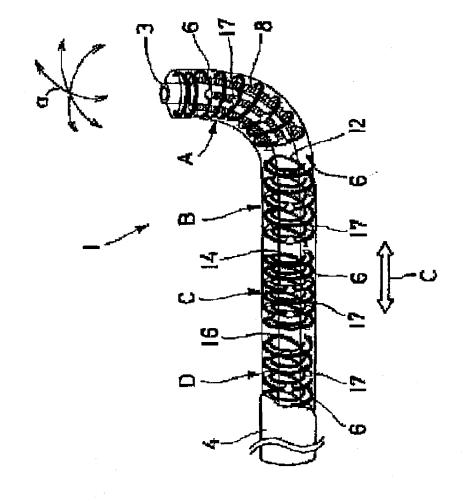
Page 2 of 3

and mounted on a straight part of the J-shape, a hardness adjusting mechanism part D comected to the expanding and retracting motion mechanism part C, and an inner tube mounted near the root of the curve of the Jmotion mechanism part C connected to the torsional rotating motion mechanism part B 3 inserted into a clearance formed inside of active pillary is totally covered by an outer these mechanism parts A, B, C and D, the tube 4 such as a thin silicon tube, and the inner tube 3 is called a working channel. shape, and an expanding and retracting bending motion mechanism part A and

COPYRIGHT: (C)2000, IPO

https://www.delphion.com/cgi-bin/viewpat.cmd/JP20233027A2

3/5/2004



, 2000233027 A